



## W2MMD



#### 

#### G.C.A.R.C. Meetings

3 Yr (93-96).......Marla Bozarth......N2DWR
2 Yr (92-95)......Joel Supkow......KB2AYW
1 Yr (91-94)......Milt Marder......WA2FGA

#### General Membership;

- ♦ 8 PM, 1st Wednesday every month.
- ◆ Deptford Elks Lodge, Highland Ave.
   1 Block from Egg Harbor Rd.

#### Board of Directors:

- ♦ 8:15 PM, 3rd Wednesday every month.
- ♦ G.C.A.R.C. site, Harrison Twp. 4-H Grounds. Approximately 1 mile south of Mullica Hill on Rt. 77.

#### Club Repeaters

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147.780/180 Mhz 223.06/224.66 Mhz 447.100/442.100 Mhz (CTCSS 131.8)

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1994

Advertising	Ray	N2WHL		
ARES/RACES				
Awards	Jack	K2ZA		
Banquet	. Marla	N2DWR		
Budget √				
Callbook Info	. John	K2JF		
Chaplain		N7GBH		
Clubhouse (Site)√	.//OPEN//			
Constitution √				
Crosstalk	. Натту	N2DUZ		
Data Processing	. Skip	KE2SC		
DX	. John	K2JF		
Field Day √				
Hamfest √				
	Bill	N2QEB		
Health & Welfare √	.//OPEN//			
Help		KN2U		
Historian/Archivist				
Hospitality √		N2PKV		
Legislation	.//OPEN//			
Membership √				
Nets				
Nominations √		-		
Publicity √				
Repeaters √				
Scholarships				
Special Services				
Sunshine				
Technical				
Training & Testing				
	. John			
( √ Indicates Standing Committees)				

#### Nets

ARES/RACES...... Sundays, 2200 Hrs 147.780/180 & 223.06/224.66 repeaters

10 Meter...... Sundays, following the ARES/RACES net. 28.350 MHZ.

#### PIANO TUNING and REPAIR

A poorly kept piano - one that is out of tune or suffering from broken parts, ill adjusted pedals or sticking keys - will discourage any piano student and impede their progress in becoming a better player.

Call...

T.D. Church - Piano Service (aka N7GBH)

Assoc. Member Piano Technicians Guild





## \*CROSSTALK\*

Mayl 1994

## President's Message

he story has been told of a ship underway during a very bad storm. The Captain and crew were utilizing all of the skills that they had acquired. This was truly a lot of work for each man and they were tiring rapidly.

The Port watch shouted to the Captain that he saw a flashing light sending the message "Change course 10 degrees to the North"...As the Captain thought about this message the ship pitched on the angry sea. After the Captain made his decision, he shouted for the Signalman to send the message..."You change course 10 degrees to the South, we are a Destroyer". Instantly a reply came back over the crashing waves "Change course 10 degrees to the North...we are a Lighthouse!"

We need to watch ourself as we go through life...we achieve many great things in the time that we are given...We should never think so highly of ourself that we forget who we are and where we have come from....As amateur radio op's we all started the same way...that person who helped us along, our Elmer was trying to continue this great hobby through YOU! Lets try to share with others during this beautiful Springtime...the time of renewal.

I would like to take a few lines to thank my Board of Directors for their continued help. They have gone out of their way to be at each of the meetings that I have planned...and when given an assignment, they worked at it. We have a dedicated bunch and you-all can be proud of their efforts.

We will be having a few work days planned this spring/summer...please try to help us keep our property looking great...we still are in need of someone to be our site chairperson...if you think that you could help us in this reguard, please let on of the Board members know or let me know.

As you know, we are having more and more people participate in the <u>Fox hunts</u>. Our most recent winners found the "bunny" in less than 2 minutes.(talk about aggressive!!!, Steve that's a force to be reckoned with!!!!!) It would be alot of fun if we could team up with another Amateur radio club nearby...if you know of such a club or individuals that would like "hunting" with us please let me know.

I have heard through the grape vine that Ten-Tec (the only manufacturer of Amateur equipment in the USA) may start to develop kits. You probably say...why is Charlie bringing this up...Consider how many of those "bells and whistles" you <u>really</u> use on the rig that you now use...if at a later date Ten-Tec, or any other company for that matter, were to begin selling kits...would you consider building one....for some people the answer would be no...BUT for some people the answer would be "maybe...it all depends".

Would those of you that might consider building a kit, or helping a new ham build a kit, begin to think about this. The only way that we are going to get a quality kit building company is to support it...and that means buying their product. Remember building our gear and accessories is very much a part of Amateur radio!

Its time to get all of those antennas tuned up, coax weatherproofed, ground rods installed ... <u>PLEASE</u> use extra caution...ask a friend to spot you...don't take any chances...someone is counting on YOU!

73 till we meet again......

Charlie Olinda N2SRQ

#### DX REPORT BY: K2JF, JOHN FISHER

YEMEN 701AA....Check the Arabian Nighhts and Family Hour nets. 14226, 14243, and 14250 kHz. Also he chats with Zedan JY3ZH, around these frequencies..QSL via PO BOX 485 ADEN YEMEN.

**SEYCHELLES S79CK....**Planned to activate COS-MOLEDO IS. from May 3 to 6th. QSL vis S79CK. Usual DX frequencies.

PACIFIC ISLAND....Ron ZL1AMO, now In TUVALU as T28RW. He plans to be active from C21 and maybe T30 in near future. Listen usual DX frequencies. QSL VIA ZL1AMO.

SRI LANKA 4S7WP....has been and will be active around 14020 Khz between 1600 and 1700Z. 4S7AVR on 14193 at 1752, 4S7WN on 14020 at 1750, and 4S7MZ on 14195 at 1745. (Note not too hard to work. Can be done with 100 watts on 14020. Did it.)

FRENCH GUIANA FY9IS....will be QRV from Salut Island in the Atlantic May 13,14 & 15. IOTA SA20

(Continued on page 6)

#### G.C.A.R.C. HAMFEST REPORT APRIL, 1994

Here's the second report of what's going on with your hamfest committee...

We have finally received the notes from the previous hamfests, and are seeing how that information can benefit the 1994 hamfest.

If you are planning to go to a hamfest out of the immediate area, please call KA2EZN, KB2JCG, or N2QEB about taking G.C.A.R.C. hamfest flyers to the event, for distributing.

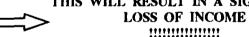
We're finally getting organized! We have the flyers ready to print, as well as the tickets. We have agreed on main prizes, (more on that next month!) and have been "on site", looking over the grounds to finalize plans on how we will be assigning spaces to tailgaters.

The grounds certainly look different with no one there. It's hard to imagine the same space teeming with radio enthusiasts, eager to find that perfect deal.



HELP!!!! We have not had any volunteers to help the club with the food concession at the hamfest. If we can't get any help, we'll have to get a outside vendor to run a concession at the hamfest.

THIS WILL RESULT IN A SIGNIFICANT



If you are considering lending a hand with this MOST important part of our hamfest, PLEASE call.

We still need many volunteers to make our hamfest a success!!!! <u>PLEASE</u> don't leave it to your fellow club members to haul the load. I'm only looking for you to spend just a few hours of your time at the hamfest. HELP THE CLUB! You're a member.....be proud of the G.C.A.R.C. and support this most important fund raiser.

If you would like to help YOUR club with just a few hours of your time on August 28th, (and I'm sure that you do!) PLEASE call me

73,

John KA2EZN



Individual(s) with an interest in the Club and a desire to expand their expertise with desktop publishing. Must be willing to fight for the 'freedom of the press' and be able to put in a few hours a month preparing this nationally read newsletter.

Anyone interested, please contact any of the Board of Directors, Club President or Vice-President. Remember.... "If <u>Harry</u> can do it, <u>anyone</u> can do it!"

#### Don't let the Club newsletter die!

I am in need of...

- ♦ a schematic for a Drake 2 meter mobile radio... Model 'Marker-Luxury'
- o a 2 meter beam and rotor to purchase.
- shareware or regular software that will control an AEA PK-232 with a MacIntosh 128.

If you can help me out, please call

73 & TNX

Charlie, N2SRQ

Article Deadline for June 1994 Crosstalk is 8 PM, Sunday, May 22.

#### FOX HUNTING BY JIM, N2WHY

The fox hunt on Saturday, April 9, 1994, started as they said it would at 0830.

I used a new method to find Steve, N2GVR. As I tuned to 147.540 MHz, I could hear Steve scratching fleas and his dog panting. I immediately went back home and took my radios and antennas pout of my car and put my dog up front.

My dog (who by the way is constantly in heat) had no problem finding Steve's dog (who really has bad breath) in about 10 minutes. Even though I was cheating it just goes to show the length a ham will go to succeed.

#### FIELD DAY - 1994

The G.C.A.R.C. Exective Board has proclaimed that as one of the largest Amateur Radio Clubs in the Northeast, and ranking #1 in the 10A Class in 1993, that this year the G.C.A.R.C. will make every effort to conduct the biggest and best Field Day Event ever, in the clubs history! For those of you who have never participated in Field Day, and don't know what it is about, I will attempt to relate just some of the ideas to you.

TRADITIONALLY, The forth weekend of June is set aside in the U.S. and Canada as Field Day weekend. It is an exerice where amateur radio operators get togeather and set up remote radio stations operating on emergency power. During this 24 hour period, attempts are made to contact as many amateur stations as possible. Even though we "compete" in Field Day, we know deep in our hearts that we're just practicing for that unexpected call to provide emergency communications. Who knows when it will come? Field Day is the only real practice some of us receive in dealing with any type of emergency communications. So we practice our emergency communication skills at least once a year, and this practice is called Field Day! Field Day operations are from 1400 hrs Saturday until 1400 hrs Sunday (Eastern Time). This period is proceded by set-up on Friday Night and Saturday morning, and clean up on Sunday afternoon. We are looking for a little help from alot of volunteers.

The tentative outline for Field Day this year is as follows:

- 1. Appoint a Chairman to accept responsibility of organizing a successful Field Day, and to also...
- Recruit volunteers to assist in various appointed committees (i.e. Band Captains, Generator Crew, Food, Set-up, Take-down, Logging, etc...) And let's not forget lots of operators and clean-up crews.

We plead with you, 'The Silent Majority', and the 'Not So Silent' too,... PLEASE GET INVOLVED! Help make this a successful Field Day! We are not asking for commitments involving long hours. The more people we can recruit, the easier it will be to have a successful Field Day.

This year, as in the past years, the callsign used will be W2MMD. All G.C.A.R.C. Club Members who are Field Day operators will use this callsign, thereby giving us all Extra Class privileges regardless of the operator's license class. An example of a typical contact would be as follows:

- Tune your receiver through the particular band you are working. Listen for a station calling... "CQ FIELD DAY".
- ♦ Return your call as... "W2MMD".
- ⋄ 3) If the station hears you, he will respond with... "W2MMD, W5ABC. Your signal report is 59 from North Texas. QSL?".
- You respond with... "QSL 59, North Texas. Your report is 59, Southern New Jersey".

That is all there is to it. Upon completion, log the contact and the time. (There are usually two operators at each position with one operating and one logging.) When operating, instead of listening, you may decide to call "CQ Field Day" and wait for a station to answer your call. It is fun and satisfying!

But that is not all! Field Day is a lot more! We encourage CW operators since each CW contact is extra credit - - - but everything counts.

One of the biggest problems in the past has been the lack of operators to help with the 'Graveyard Shift', from about 2200 on Saturday until 0700 Sunday moming. If you can help fill this gap for an hour or two, that would be great. Not operating when the band goes out is one thing, but it is a shame to hear all those stations call CQ, when we don't have enough operators to keep the transmitters going.

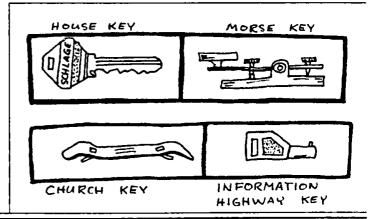
We serve refreshments at Field Day for those who are perticipating. We encourage visitors to see what is going on, but we tend to discourage 'freeloaders' who come just for the food and drink. Contribute a little of your time and you're welcome to eat and drink as much as you please until we run out!

We will continue to remind you about this event until June 24 - 26 (Friday - Sunday). Besides the physical help, we can use, and need, equipment for Field Day such as Transceivers, Antennas, Coaxial Cable, Extension Cords, Ladders, Antenna Tuners, Tools, etc... We would appreciate any commitment you can make.

Please contact me N2GVR or any member of the G.C.A.R.C. Board of Directors, if you have any questions or if you can help. Let's make this the best and most successful Field Day exercise that the club has ever conducted! And look for the meeting times and places of the orginizational meetings for this here in Crosstalk.

Sincerely (73)

Steve, N2GVR Field Day Chairman



ZCZC AG95 QST de W1AW ARRL Bulletin 31 ARLB031 From ARRL Headquarters Newington CT April 11, 1994 To all radio amateurs

SB QST ARL ARLB031
ARLB031 ARRL Vanity call proposal

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ARRL Develops Position in "Vanity" Call Sign Proposal

On April 9, the League's Executive Committee approved the recommendations of the Ad Hoc Committee on Preferred Call Signs in preparation for the ARRL's filing of formal comments in PR Docket 93-305, the FCC's "Vanity" call sign proposal. The recommendations were based on membership input solicited by the committee.

The committee feels that all amateurs should be eligible for participation in the program. A phase-in period and priority system of "gates" should be adopted to allow the Commission relief from the administrative burden expected from the heavy initial submission of applications, and to afford licensees the opportunity to regain lost call signs. Included in the first 'gate' would be those who wish to obtain the call sign of a direct family member. Clubs with lapsed club licenses and call signs should be allowed to recoup those call signs in the first priority group. The second gate in the priority system would be opened to Extra Class licensees; a priority third gate would be opened to Advanced Class licensees.

The League will recommend that 1 X 1 call signs, such as 2A, be made available for limited duration special events of national significance.

A copy of the committee's complete report is available for an SASE from the Regulatory Information Branch at League Headquarters, and on electronic services including CompuServe, America On Line, Prodigy, and the ARRL Bulletin Board. It is also available by e-mail from infoarrl.org, or by FTP from oak.oakland.edu. The file name is "93-305.rpt."

#### STILL WANTED

THE GCARC BOARD OF DIRECTORS is still looking for a couple of items to be donated to the Club. We are in need of an overhead projector and a 6 ft portable screen to be used with the projector.

If you know of someone who has these items and could/would donate them to the Club, please give one of the Directors, or the President a call. (The second option is still to purchase these items at a VERY good price!)

ZCZC AG96
QST de W1AW
ARRL Bulletin 32 ARLB032
From ARRL Headquarters
Newington CT April 12, 1994
To all radio amateurs



#### RESOLUTION GAINS MAJORITY

The Amateur Radio Service Joint Resolution, H. J. RES. 199, now has a majority of the US House of Representatives as cosponsors. On April 11, four additions to the list of cosponsors brought the total to 220, (of which three are non voting delegates).

The four are: Rep. James Talent (R-MO), DEL. Eleanor Holmes Norton (D-DC), Rep. Thomas Ridge (R-PA), and Rep. Don Young (R-AK).

The resolution seeks formal recognition of the value of amateur radio to the country, would support amateur radio as "national policy," and would encourage rules and regulations to facilitate amateur radio as a public benefit by encouraging new technologies.

Including resolution sponsor Jim Cooper (D-TN), the total number of voting sponsors is now 218. There are currently 434 representatives in the house.

More on the resolution and the league's efforts in Washington were in April QST, pages 47 to 50.

NNNN



What do you think? The K's are kind of cute, and the 0 is complete spiritually. Should I get my initials? How about..........

ZCZC AG97 QST de W1AW ARRL Bulletin 33 ARLB033 From ARRL Headquarters Newington CT April 15, 1994 To all radio amateurs

SB QST ARL ARLB033 ARLB033 Club rule changes sought

Club rule changes sought

The ARRL has petitioned the FCC to increase the minimum number of members necessary for granting a club station license from two to four. The FCC has designated the petition RM-8462.

The League said that the FCC's 1993 notice of proposed rule making to reinstitute club licensing makes this a timely issue.

In 1990, the League, as part of a petition for rule making seeking miscellaneous changes in the Amateur Service Rules, proposed the same change. At the time, no club station licenses were being issued, but the League said that if that program was resumed, the two-person criteria would invite applications from parties that are not clubs, such as two or three licensees simply wanting an alternative call sign.

The FCC at that time declined to change the criteria, since new club licenses were not being issued.

The League said that the two-person criterion is insufficient to distinguish bona fide clubs -- which should be encouraged and provided the identity of a separate license and call sign -- from two or three individuals who do not function as a normal Amateur Radio club.

The League said, by way of example, that of 1,957 Amateur Radio clubs that are ARRL-affiliated, only 10 have fewer than four members.

Until 1976, the FCC required an application for a club station

license to file copies of the club's constitution and bylaws, which helped ensure that the club was bona fide.

The FCC has not issued club station licenses since 1979. NNNN



ZCZC AG99
QST de W1AW
ARRL Bulletin 35 ARLB035
From ARRL Headquarters
Newington CT April 18, 1994
To all radio amateurs

SB QST ARL ARLB035 ARLB035 New rules on messages



The FCC has released its Report and Order in PR Docket 93-85, regarding messages relayed by amateur high speed networks. The new rules, effective June 1, 1994, will establish what the FCC calls "a compliance policy for amateur stations participating in automatic message-forwarding systems."

The new rules relieve most station operators in such networks of responsibility for the content of the messages relayed by their stations. Under current rules, all licensees in a chain of

forwarding stations are responsible for message content.

Originators of messages continue to be responsible, and the first forwarding stations are responsible either for the content of the message or for verifying the identity of the originator.

The FCC also relieved repeater control operators of responsibility for inadvertent retransmission of communications that violate the rules. All operators remain responsible for discontinuing communications that violate the rules as soon as they become aware of their presence.

More information on the new rules will appear in June OST.

**NNNN** 

### SAILE

Ray Martin, WB2LNR, has a 60 foot, self-supporting, commercial grade Morrison tower. If you are interested, he requests that you send him a note at the following address:

Ray Martin P.O. Box 404 Franklinville, NJ 08322-0404

John, KA2EZN, has a Yaesu FT-227R, 2 meter transceiver, for sale. It puts out 10 watts, and he is asking \$150.

If you are interested, give John a call

#### THE HUNT

## "Steve Sez"

#### EDUCATION HOW OP-AMP CIRCUITS ARE USED

Well here are the results of the April 9th "T" Hunt with me N2GVR and my new friend SHAMMY, a full grown Afgan Hound (with bad breath and fleas) as the "T".

The hunt started at 0830 as planned on 147.540 mhz.

- 1 N2KLE/N2DWR.....1 min 18 sec ???????
- 2 N2WHY ...... 9 min 22 sec
- 3 WA2TOP/Ashely .... 1 hr 07 min 12 sec
- 4 N2WUP/N2WSI.....1 hr 46 min 10 sec

#### Late starts:

AA2BN/N2WKV..... Start 0950 Finish 1035 N2SRQ...... Start 0930 Finish 1030 N2YIO...... Just trying it out, no times

I'd like to thank you all for participating and most of all N2WHY for the coffee and N2YIO for the donuts. Hope you all had fun and look at the times, isn't it great. Look for the next hunt announcement in this issue, it will be by the winners of this one and it should be good.

Happy Hunting,

Steve, N2GVR

#### **GREENER PASTURES**

Our thoughts persuade, and we comply. And when we get to somewhere else, we find the grass is often, dry. We fail to see the beauty all around us, every day. While looking for the greener grass, today just slips away. The childern leave, the moment passes. Take it, that one chance, for it will never come again. One turning, One sweet dance. A single revolution. Once around... a single lick. Dip into the moment. Scoop it up, and eat it, quick! Savor it, the magic Taste the sweet bouquet.

Moments in a lifetime so quickly... melt away...

The grass is greener somewhere else.

**Dolores Dahl** 

Because of their versatility and low cost, operational amplifiers are the workhourses of analog electronics. This 30-minute video takes you inside the operational amplifier circuit. You'll actually see how op-amps work and how they are used as amplifiers and comparators in control circuits and in other applications. Biasing and power supply requirements are also shown.

Because this class will be during Field Day month I will only be available for two classes. This will be shown out at the clubhouse at 1300 hrs on June 4th and 11th. Contact me if you plan to attend

Steve. N2GVR

(Continued from page 1)

JAPAN....an operation from UJI Archipelago by JI6KVR start around May 6.QSL JI6KVR. Usual DX frequencies.

FIJI,TONGA, & WESTERN SAMOA..JR7OEF....will be active from these South Pacific locations: May 2,3, & 4 5W0NI; May 4,5 & 6 as A35NI; May 7 & 8 as 3D2EF. QSL VIA JR7OEF.

SAINT MAARTEN....From May 24 to 30, Chod VP2ML/WB2CHO and Frank AH0W/OH2LVG will be signing PJ7/WB2CHO and PJ7/OH2LVG. QSL PJ7/WB2CHO via K1RH. QSL PJ7/OH2LVG and PJ8X via KE7LZ.

**SAD NOTE:** HK0BKX is now a silent key. Francisco provided, countless DXCC credits for San Andres Island. He will be missed.

DXAC VOTE RESULTS: (From W1AW DX Bulletin Nr 22 ARLD022) "By unanimous vote, the ARRL DXAC (DX Advisory Committee) passed a recommendation to delete Walvis (ZS9) and Penguin Islands (ZS0,1). The DXAC decided that these entities no longer meet the DXCC criteria following their turnover to Namibia by South Africa. This recommendation has been sent to the Awards Committee along with a suggested effective date of March 1, 1994. In another ballot, the DXAC voted down a proposal to add additional single band awards to the DXCC program (There were 13 no 2 yes votes with 1 abstain.) The committee also voted down a proposal to add a 10-meter DXCC honor roll by a 15 to 1 margin. Committee members expressed support for the mod-specific honor rolls that now exist (mixed, phone, CW, RTTY)."

To those who went I hope you had a great time at Dayton.

Tnx QRZ DX, ARRL, NJDXA, C U in the Pile-Ups.

### May 01 - June 04, 1994

G.C.A.R.C. & Amateur Radio Events

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
May I 20:00 ARES/RACES 20:30 10 Mtr Net - 28:350MHz	May 2	May 3 19:30 Camden County - ARES\ RACES Net	May 4  20:00 GCARC Gen. Mom. Mtg.	May 5 19:00 1010 Net - 28.360 MHz	Мау 6	May 7 13:00 Ham Radio Education »Hamfest - Cherry Hill, NJ. »Hamfest - Oswego, NY Hamfest - Kent Island, Md.
May 8  20:00 ARES/RACES  20:30 10 Mtr Net - 28:350MHz  Mother's Day	May 9	May 10 19:30 Camden County - ARES\ RACES Net	May 11	May 12 19:00 1010 Net - 28.360 MHz	May 13	May 14 13:00 Ham Radio Education
May 15 20:00 ARES/RACES 20:30 10 Mtr Net - 28:350MHz »Hamfest - Wrightstown. Pa	May 16	May 17 19:30 Camden County - ARES RACES Net	May 18 19:30 GCARC B.O.D. Mtg	May 19 19:00 1010 Net - 28.360 MHz 19:00 VEC Testing - Bellmawr 19:00 GCARC Hamfest Mtg. @ Clubhouse	May 20 »Hamfest - Rochester, NY	May 21 13:00 Ham Radio Education »Hamfest - Rochester, NY  Armed Forces Day
May 22  20:00 ARES/RACES  20:30 10 Mtr Net - 28:350MHz  »Hamfest - Hagerstown, Md  »Hamfest - Rochester, NY	May 23	May 24 19:30 Camden County - ARES RACES Net	May 25	May 26 19:00 1010 Net - 28.360 MHz	May 27	May 28  13:00 Ham Radio Education
May 29  20:00 ARES/RACES  20:30 10 Mtr Net - 28:350MHz  Hamfest - West Friend- ship, Md	May 30  Memorial Day (Observed)	May 31 19:30 Camden County - ARES RACES Net	June 1 20:00 GCARC Gen. Mem. Mtg.	June 2 19:00 1010 Net - 28.360 MHz	June 3	June 4 13:00 Ham Radio Education Hamfest - Rome, NY

#### LEGEND:



N2IMH..... JIM

N2IVN ...... CHRIS N2KLD ..... MARY ELLEN

N2KLE ..... JOE N2LZS..... LOU

# Cloucester County ARES/RACES Callup List





# Cloucester County ARES/RACES Net Control List



WA2USI CHICK	N2MWXDENNIS
KA2KMW ED	N2NGQLLOYD
N2DWR MARLA	N2NLEJOHN
AA2BN JOHN	N2PKJBILL
K2HPV HERB	N2PKKPEG
K2JF JOHN	N2PKNTONY
K2OWE JIM	N2PKPMARK
K2ZA JACK	N2PKTLOU
KA2DZF PETE	N2QEBBILL
KB2AYU AL	N2QEEGARY
KB2DHQ JERRY	N2RTXJOHN
KB2EAH BOB	N2SBPBARBARA
KB2EAI BUTCH	N2SVNJIM
KB2ETV JAY	N2SROMIKE
KB2ETX JEFF	N2SRQCHARLIE
KB2FRN JOE	N2SSTONY
KB2GL JOHN	N2STQBILL
KB2GW GEORGE	N2TXWGUS
KB2IRK WES	N2WFDROB
KB2JCG WALT	N2WFMDON
KE2ES TOM	N2WFOGARY
KE2SC SKIP	N2WHLRAY
KE2WC MARK	N2WUPSTEWART
KN2U KEN	N2YIOGLENN
N2AKL ROSLYN	NY2JBOB
N2ASV RUSS	N3GSDJOHN
N2AYK ED	WA2FGAMILT
N2CME PETE	WA2IBZHOWARD
N2DWK SAM	WA2PFCED
N2FJQ AL	WA2SITRICH
N2FKT DAN	WA2TMLCHUCK
N2FNF IRMA	WA2TOP MIKE
N2FPO MARTY	WA3UVVCORY
N2GVR STEVE	WB2CAKJERRY
N2HYS JANICE	WB2DXBSONNY

WB2EFL....HERB

WB2OZE...JOSE

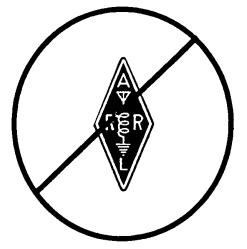
WB2VFX....BILL

MAY 01 N2DWR MAY 08 AA2BN MAY 15 KB2AYU	AUG 0 7 N2SRQ AUG 14 KA2KMW AUG 21 N2GVR
MAY 22 KN2U MAY 29 N2AKL	AUG 28 WA3UVV
	SEPT 04 KB2DHQ
JUNE 05 N2DWK JUNE 12 N2FNF	SEPT 11 N2MWX
JUNE 19 N2KLD JUNE 26 N2KLE	SEPT 25 N2YIO
JULY 03 N2NLE JULY 10 N2PKJ JULY 17 N2SRO	
JULY 24 WA2IBZ JULY 31 WB2DXB	

#### IS YOUR NAME/CALL HERE?

If so, your ARRL membership has expired! See the GCARC Treasurer to renew, and get the club a couple of dollars at the same time!

WA2WFZ	Mark	02/28/82	NJ2B	Harry	08/31/89
KB2ERL	Robeert	09/30/93	N2LCN	Ed	12/31/93
AA2DJ	John	04/30/93	N2IMH	James	08/31/92
WB2VNS	Vincent	08/31/90	N2DWK	Sam	09/30/89
KB2AYW	Joel	05/31/92	WB2HVJ	Norman	06/30/90
WA2DUV	Willie	10/31/87	N2PJV	Ed	08/31/92
KC2PC	Chris	06/30/85	WA2YLC	Richard	11/30/93
KA2OSW	Craig	03/31/89	N2NMY	John	12/31/93
KA2ZRN	Joanne	03/31/89	KB2ETT	John	02/28/89
N2DJZ	James	07/31/91	WA2PFC	Ed	05/31/88
WB2OYQ	Walton	12/31/93	KB2EUA	Marium	09/30/93
WA2USI	Charles	01/31/94	WA2ZND	Emmett	02/29/88
WB2OZE	Jose	03/31/86	N2SBV	Henry	02/28/94
N2FKS	Mike	09/30/88	N2DNJ	Joseph	09/30/93
KE2WC	Mark	11/30/93	KB2PAU	James	01/31/94
WC2K	Richard	03/31/93	KB2DHQ	Јеггу	07/31/90
K2UUY	Frank	07/31/90	KA2EZN	John	10/28/82
КВ2СОВ	Robert	12/31/90	N2IVN	Chris	07/31/92
N2DJN	Hank	02/29/88	WB2GSF	Наггу	04/30/92
N2RCJ	John	10/31/93	K3WIL	Milt	02/28/92
			N2IMK	Gene	06/30/91



R U A NON ARRL HAM?

#### 1.2 GIGAHERTZ: A NEW FRONTIER?

The 1.2 GHz band (a.k.a. 23cm & "1296") is certainly not as crowded as 2 meters. In fact, there is very little activity on this band in our area. Of course, at one time, 2 meters was fairly desolate.

It may surprise you that a number of members of our club have equipment for this band. A number of others are interested in becoming active up there as well.

I am considering the establishment of a repeater and would like to know if any of the readers of this newsletter are interested in joining in.

This "territory" is ideal for someone who likes to experiment with new things and considers themselves something of a pioneer.

There is already a growing number of radios on the market which cover this band. ICOM, Yaesu, Kenwood and Standard all make single, dual, or triple band radios. Even handhelds are available. I have both a 440/1296 mobile and HT.

Putting such a repeater on the air is not very difficult. Because of the short wavelength, antennas need only to be 10 feet apart vertically to provide adequate isolation. NO DUPLEXER IS NEEDED. Amplifiers in the 18 to 70 watt range are also easily obtained. Omnidi-

rectional antennas can be found with 18db gain figures. They are fairly small, too.

A repeater could be assembled with either 2 rigs or, 2 dual band radios. The 440 side of each could provide the control link and allow greater flexibility with transmitter power.

A typical setup with 10 watts into the antenna would result in an effective radiated power of 640 watts. With 36 watts an ERP of 2,300 watts would result!

Sound interesting? Looking for a challenge? Just like to try something new?

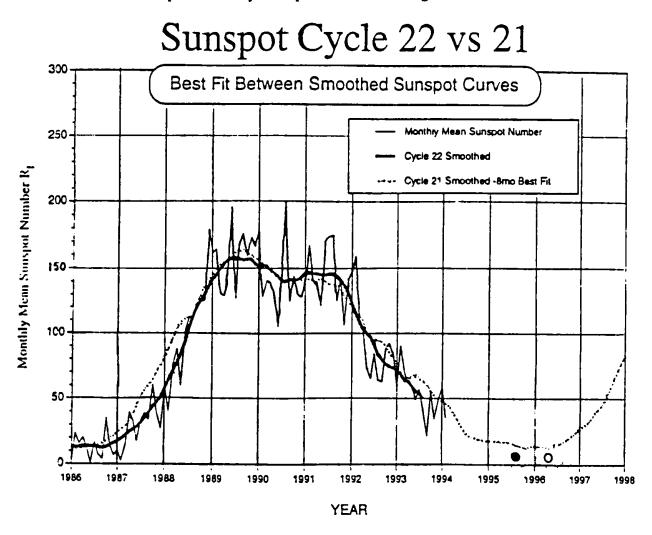
If you are interested in this, please let me know.

TNX.

WA3UVV, Cory

#### **Expected Minimum for Solar Cycle 22**

Solar cycle in the modern record have not been 11 years in length. A group of shorter cycles have had a mean duration of 10.2 years, and a set of longer cycles have had a mean duration of 11.8 years. If cycle 22 is a short cycle, this would imply that minimum would occur late 1996; a longer cycle would end in the second half of 1999. Various rules or guidelines are used to predict the occurrence of the solar minimum for a solar cycle. One approach to foreseeing the next minimum would be to overlay the smoothed mean sunspot number for solar cycle 21 on the smoothed mean sunspot number for solar cycle 22. This estimate assumes that the present pattern of the solar activity levels will continue. Using this approach we can expect that the middle of 1995 will be the earliest time of solar minimum for cycle 22, which is represented by the black dot in the figure. The fit between the smoothed curves of these two cycles was obtained at the start of 1990, and subsequent data have not changed the phase relationship between these two curves. From another perspective, we see that solar minimum follows about 3-5 years after the first spotless day after the peak of the cycle. This rule would place the solar minimum for cycle 22 in late 1996, since the first spotless day was in fall 1993 ( the 1996 solar minimum is represented by the open circle in the figure.



The original plot was created by Patrick McIntosh/NOAA



## WARMINSTER AMATEUR RADIO CLUB'S

20TH YEAR!

# BERMALL

May 15, 1994 Rain or Shine

Middletown Grange Fairgrounds, Penn's Park Road, Wrightstown, Pa. Vendor Setup 6AM - General Public from 7AM to 2PM

VE Testing - Call for details

Food & Beverages Available

**Equipment Check-Out Table** 

Gate Donation only \$5.00 per person. XYL and kids FREE

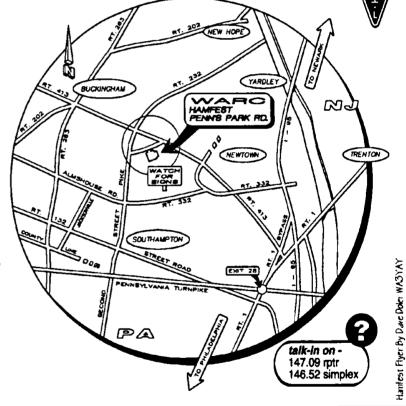
Unlimited outdoor tailgating space available at \$8.00 per car-width space (head-in parking).

Approx. 80 indoor spaces available at \$12.00. Tables provided with electricity available at selected locations. *CALL FOR MORE INFO!* 

#### For more Information

For Vendor Info contact -Woody Woodside N6XES (215) 672-8482 665 St. Davids Ave. Warminster, Pa. 18974

For General Info contact -George Brechman N3HBT (215) 443-5656



### Present this form at the Gate - Save \$1.00 off admission

\_\_\_\_\_ Gate Admission @ \$5.00 ea.

\_\_\_\_\_indoor Spaces @ \$12.00 ea.

\_\_\_\_ Outdoor Spaces @ \$8.00 ea.

Note: I admission included with each indoor or outdoor space. Form must be completely filled for \$1.00 discount.

Name	Call _	· <del></del>
Address		
City	State _	Zip
Telephone Number		

Mail completed preregistration for vendor space(s) with check or money order made out to WARC to Woody Woodside N6XES 665 St. Davids Ave. Warminster, Pa. 18974